

# IMPS 2024

Prague, Czech Republic

July 16–19, 2024 • Short Courses July 15

## Poster Session Reception

**Wednesday, July 17 • 4:45 p.m. - 6:15 p.m.**

*(Presenters will be available at posters from 5:00 p.m. - 6:15 p.m.)*

**Location:** The VŠE Building in the Atrium of the RB building

**Address:** nám. Winstona Churchilla 1938/4, 130 00 Praha 3 - Žižkov

<b>Poster 1</b>	<b>Yunhang Yin</b>	Estimating the root mean square error of approximation (RMSEA) with multiply imputed data under nonnormality
<b>Poster 2</b>	<b>Ying Yuan</b>	Bayesian latent class dynamic mediation model
<b>Poster 3</b>	<b>Suyu Liu</b>	Bayesian pattern-mixture model for nonignorable missing data in longitudinal mediation analysis
<b>Poster 4</b>	<b>Yuqi Liu</b>	A two-step estimator for growth mixture models with covariates
<b>Poster 5</b>	<b>Yuji Tsubota</b>	Causal mediation analysis for binary outcomes with asymmetric link functions
<b>Poster 6</b>	<b>Youn-Jeng Choi</b>	Culturally responsive testing using generative AI
<b>Poster 7</b>	<b>Yejin Woo</b>	Cultural and linguistic DIF in PISA 2018 reading assessment
<b>Poster 8</b>	<b>Naoto Yamashita</b>	Exploratory extension of generalized structured component analysis
<b>Poster 9</b>	<b>Pedro Henrique Ribeiro Santiago</b>	Longitudinal network of peer problems and emotional symptoms among adolescents
<b>Poster 10</b>	<b>Andreas Kurz</b>	An improved inferential procedure to evaluate item discriminations in a conditional maximum likelihood framework
<b>Poster 11</b>	<b>Hyunjee Oh</b>	Longitudinal R-DINA model: a solution to small samples
<b>Poster 12</b>	<b>Hongwei Zhao</b>	MixML-SEM: a parsimonious approach for finding clusters of groups with equivalent structural relations in presence of measurement non-invariance

<b>Poster 13</b>	<b>Cecilia Marconi</b>	An early numeracy brief assessment: parametric and non-parametric IRT models
<b>Poster 14</b>	<b>Seunghyun Lee</b>	Latent conjunctive Bayesian network: unify attribute hierarchy and Bayesian network for cognitive diagnosis modeling
<b>Poster 15</b>	<b>Jeongwon Choi</b>	Do (non-)regularized partial correlation networks generalize? Re-evaluation of network generalizability
<b>Poster 16</b>	<b>Linn Zapffe</b>	Modeling age as predicting rater disagreement with a tri-factor model
<b>Poster 17</b>	<b>Ikko Kawahashi</b>	Asymptotic standard errors of equating coefficients using second-order delta method for non-parametric ability distribution
<b>Poster 18</b>	<b>Fathima Jaffari</b>	Cutoff for the deleted-one-covariance-residual case influence measure in covariance structure analysis
<b>Poster 19</b>	<b>Siqi Sun</b>	Precision and practicality: a comparative simulation of measurement properties of visual analog scales and likert scales
<b>Poster 20</b>	<b>Haeyeon Ahn</b>	Exploring performance and utilization of generative AI based essay assessment
<b>Poster 21</b>	<b>Katarzyna Zawisza</b>	Psychometric properties of online social capital measurements in health studies: scoping review
<b>Poster 22</b>	<b>You-Lin Chen</b>	Behavior of modified test statistics in correlation structure analysis
<b>Poster 23</b>	<b>Reeta Kankaanpää</b>	Factor scores or sum scores when evaluating intervention effectiveness?
<b>Poster 24</b>	<b>Denny Kerkhoff</b>	Proposing a two-step simulation procedure to assess replicability for planned studies
<b>Poster 25</b>	<b>Emma Somer</b>	Comparing regularization, alignment, and model modification for partial measurement invariance
<b>Poster 26</b>	<b>Krystof Petr</b>	Using machine learning for extracting personality insights from projective responses on inkblots
<b>Poster 27</b>	<b>Hun Won Choi</b>	Topic analysis of the AI-based assessment using LDA topic modeling
<b>Poster 28</b>	<b>Sam Cacace</b>	Military stigma scale invariance across national guard education and paygrade
<b>Poster 29</b>	<b>Marwin Carmo</b>	A holistic view of academic performance: beyond averages with MELSM and spike-and-slab
<b>Poster 30</b>	<b>Nele Bögemann</b>	The crossed random effects drift diffusion model – a simulation study
<b>Poster 31</b>	<b>Eunji Lee</b>	Item and test development for next generation assessments
<b>Poster 32</b>	<b>Kamila Zahradnickova</b>	Innovation as a dynamic system: a network approach to employee innovativeness
<b>Poster 33</b>	<b>André Achim</b>	A signal cancelling approach to exploratory factor analysis.
<b>Poster 34</b>	<b>Chia-Yen Hsieh</b>	A study of maternal involvement, family environmental diversity and social competence of young children in different ethnic groups-secondary data research from kids in Taiwan-national longitudinal study of child development and care (KIT)
<b>Poster 35</b>	<b>Sugyung Goh</b>	DIF detection using Rasch trees method and mixture Rasch model
<b>Poster 36</b>	<b>Seongkyung Kim</b>	Research trends in alternative education using keyword network analysis
<b>Poster 37</b>	<b>Youxiang Jiang</b>	The response style in continuous bounded response: modeling and application
<b>Poster 38</b>	<b>Hannelies de Jonge</b>	How to include dichotomous variables in meta-analytic structural equation modeling?

<b>Poster 39</b>	<b>Kentaro Hayashi</b>	A note on the bias correction of estimated eigenvalues applied to a correlation matrix, with applications to factor analysis
<b>Poster 40</b>	<b>You Kyoung Hwang</b>	The impact of measurement non-invariance on ANCOVA performance
<b>Poster 41</b>	<b>Michalis Michaelides</b>	Predictors of response-time effort across countries in PISA 2015 science
<b>Poster 42</b>	<b>Zhiyuan Shen</b>	Comparison of component-based SEM methods in testing component interaction effects
<b>Poster 43</b>	<b>Marek Muszyński</b>	Response styles stability modelled with IRTrees
<b>Poster 44</b>	<b>Carmen Ximenez</b>	Sensitivity of goodness-of-fit indices to model misspecification in Bifactor models: a simulation study examining the consequences of ignoring cross-loadings
<b>Poster 45</b>	<b>Javier Revuelta</b>	Overfactoring in skewed rating scale data: a comparison between factor analysis and the graded response model
<b>Poster 46</b>	<b>Yilin Li</b>	Determining the number of factors in exploratory factor analysis with model error
<b>Poster 47</b>	<b>Inés Tomás</b>	Identifying predictors of careless responding trajectories over time
<b>Poster 48</b>	<b>Yasuhiro Yamamoto</b>	Estimation issues in growth curve models with short waves
<b>Poster 49</b>	<b>Timo Bechger</b>	Model-based test and item analysis
<b>Poster 50</b>	<b>Lingling Wang</b>	Utilizing the Bayesian networks' structural learning algorithm to estimate q-matrix in cognitive diagnosis models
<b>Poster 51</b>	<b>Sarah Humberg</b>	Estimating nonlinear effects of random slopes with multilevel SEM
<b>Poster 52</b>	<b>Michaela Cichrová</b>	Differential item functioning: effect sizes classification
<b>Poster 53</b>	<b>Viola Merhof</b>	How to (not) successfully separate trait and response style parameters in IRTree models
<b>Poster 54</b>	<b>Michaela Varejkova</b>	Leveraging factor copula models to address non-normality and heavy-tailed distributions in cyberbullying data
<b>Poster 55</b>	<b>Alexander Avian</b>	A new approach for detecting prosopagnosia in children
<b>Poster 56</b>	<b>Una Mikac</b>	Interpretation of change scores in latent change score models
<b>Poster 57</b>	<b>Anna Comotti</b>	Exploring youth mental health with IRT: proposal of GHQ-12 reassessment
<b>Poster 58</b>	<b>Lisa Peeters</b>	Mapping methodological variations in ESM research: a systematic review
<b>Poster 59</b>	<b>Hannah Lewis</b>	Multi-method evaluation of the predictive utility of self-report measures
<b>Poster 60</b>	<b>Youmin Hong</b>	Quantifying predictive uncertainty in validity studies
<b>Poster 61</b>	<b>Paulina Grekov</b>	Bayesian posterior predictive checks to analyze flexible distributional models
<b>Poster 62</b>	<b>Hyunjung Lee</b>	Performance of parallel analysis in bifactor model with ordinal items
<b>Poster 63</b>	<b>Meltem Ozcan</b>	Comparing traditional measurement invariance and alignment approaches to data harmonization
<b>Poster 64</b>	<b>Jongpil Kim</b>	Preliminary study: differential latency of individually administered clinical assessments
<b>Poster 65</b>	<b>James Zoucha</b>	Test length optimization with deep reinforcement learning
<b>Poster 66</b>	<b>Jun-Ting Liu</b>	Robustness of balanced item parceling in treating acquiescence in SEM

<b>Poster 67</b>	<b>Pieter Schaap</b>	Testing minor factors incremental value in an essentially unidimensional measure of work-family enrichment
<b>Poster 68</b>	<b>Haneul Lee</b>	Exploring the feasibility of automatic item generation for Korean language assessment considering item types
<b>Poster 69</b>	<b>John Sabatini</b>	Item and scale invariance: comparing at-risk post-secondary to school students
<b>Poster 70</b>	<b>Yi-Jou Chen</b>	Psychosocial factors influence undergraduates' mental health: a SEM mediation analysis
<b>Poster 71</b>	<b>Luqi He</b>	Evaluation of GAIN's performance in handling missing data in SEM
<b>Poster 72</b>	<b>Hyunjoo Kim</b>	A two-step q-matrix estimation method
<b>Poster 73</b>	<b>Haruhiko Mitsunaga</b>	A visualization method to describe test equating procedure
<b>Poster 74</b>	<b>Che Cheng</b>	Existence and uniqueness of MLE of the ability in IRT
<b>Poster 75</b>	<b>Shuang Wang</b>	Uncovering efficient reasoning strategies in interactive inquiry tasks using sequence mining
<b>Poster 76</b>	<b>Qing Cai</b>	Detecting DIF in PISA reading frequency measurement
<b>Poster 77</b>	<b>Jooho Lee</b>	Trends in teacher professionalism studies using keyword network analysis
<b>Poster 78</b>	<b>Diego Iglesias</b>	Predictive metrics in multilevel models with continuous outcomes
<b>Poster 79</b>	<b>Cheng-Hsien Li</b>	The performance of latent mean estimates: comparing full and partial scalar invariance
<b>Poster 80</b>	<b>Angelina Kuchina</b>	Added value of subscale change scores for evaluating individual change
<b>Poster 81</b>	<b>Haruki Oka</b>	Refinement of automatic item generation for mathematical questions: applying item response theory to large language models
<b>Poster 82</b>	<b>Eva Šragová</b>	Do visual analogue scales perform better than Likert-type scales?
<b>Poster 83</b>	<b>Miguel A. Sorrel</b>	Framework choice: discrete (CDM) or continuous (MIRT) modeling in psychometrics
<b>Poster 84</b>	<b>Nai-En Tang</b>	Examining the complex structure of OSCEs using exploratory graph analysis
<b>Poster 85</b>	<b>Zhaoyu Wang</b>	Using a bi-factor version of MGGUM for multidimensional proximity-based data
<b>Poster 86</b>	<b>Igor Himelfarb</b>	Item classification by functional principal component clustering and neural networks
<b>Poster 87</b>	<b>Adam Strojil</b>	Video-administered questionnaire: psychometric properties and comparison with a text-based format
<b>Poster 88</b>	<b>Po-Yi Chen</b>	Conducting specification search for partial invariance models with unbalanced data
<b>Poster 89</b>	<b>Theren Williams</b>	A study on restricted HMMs for latent class attribute transitions
<b>Poster 90</b>	<b>Yewon Kim</b>	Comparing LPA results by missing data methods in various conditions
<b>Poster 91</b>	<b>Hyeonjoo Oh</b>	Measurement invariance of the WJ IV in clinical samples
<b>Poster 92</b>	<b>Shunsen Huang</b>	ChatGPT in the social and health sciences: can ChatGPT help people improve their health literacy?
<b>Poster 93</b>	<b>Jiwei Zhang</b>	Fast and efficient distributed Bayesian inference in large-scale educational assessment
<b>Poster 94</b>	<b>Stella Kim</b>	Multivariate generalizability theory for automated item generated test forms

<b>Poster 95</b>	<b>Xue Zhang</b>	How many IRT parameters does it take to high stake test?
<b>Poster 96</b>	<b>Yi-Jhen Wu</b>	The impact attribute hierarchies' distribution on diagnostic classification accuracy
<b>Poster 97</b>	<b>Yi Hsuan Tseng</b>	Conditional process analysis with measurement errors via R package silp
<b>Poster 98</b>	<b>Yoshikazu Terada</b>	Statistical properties of matrix decomposition factor analysis
<b>Poster 99</b>	<b>Anikó Lovik</b>	Combining results from a large number of cluster analyses: a proof-of-concept analysis
<b>Poster 100</b>	<b>Bing Cai Kok</b>	Estimating Controllability metrics for ordinal vector autoregressive models
<b>Poster 101</b>	<b>Meltem Acar Güvendi</b>	To what extent dominant items effect on factor retention methods' performance?
<b>Poster 102</b>	<b>Michalina Gajdzica</b>	Evaluating DIF within the vulnerability to abuse screening scale (VASS)
<b>Poster 103</b>	<b>Jiří Novák</b>	Anonymisation of data for open science in psychology
<b>Poster 104</b>	<b>Kaitlin Griffith</b>	Exploring child well-being trends through psychometric meta-analysis of international large-scale assessments
<b>Poster 105</b>	<b>Edita Chvojka</b>	Opening a Pandora's box of SEM: a systematic review of model characteristics influencing model fit
<b>Poster 106</b>	<b>Anna Panzeri</b>	Assessing discriminant validity: bridging traditional and modern approaches
<b>Poster 107</b>	<b>Klint Kanopka</b>	A LASSO approach for short form item selection
<b>Poster 108</b>	<b>Anna Winklerová</b>	Linguistic features usability analysis in educational context
<b>Poster 109</b>	<b>Meltem Ozcan</b>	Does deleting biased items make selection fairer and more accurate?
<b>Poster 110</b>	<b>Filip Martinek</b>	Predicting item difficulty with text analysis and machine learning in different languages and item types
<b>Poster 111</b>	<b>Younyoung Choi</b>	A two-step approach for personalized treatment recommendations in mental health using convex generalized structured component analysis and Bayesian networks
<b>Poster 112</b>	<b>Victor Ortuño</b>	Adaptation and preliminary reliability studies of basic interest markers (BIM)
<b>Poster 113</b>	<b>Preston Botter</b>	Beyond normal: exploring RMSD performance with alternative theta distributions
<b>Poster 114</b>	<b>Jordan Wheeler</b>	Impact of priors on parameter estimates of the Rasch model
<b>Poster 115</b>	<b>Yen Lee</b>	The performance of different shrinkage parameter decision principle for GME-EFA
<b>Poster 116</b>	<b>Yevgeniy Ptukhin</b>	The impact of non-normality on DIF detection for dichotomous items
<b>Poster 117</b>	<b>Jeremy Miles</b>	The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis: a replication
<b>Poster 118</b>	<b>Wenjue Lo</b>	The issues with alternative fit indices of CFI and RMSEA
<b>Poster 119</b>	<b>Minsun Chi</b>	Complementing Rasch-trees with various DIF detection methods for media-addiction scale
<b>Poster 120</b>	<b>Carolina Guidotti</b>	Adaptation and preliminary validity results of questionnaire on negative stereotypes towards old age (CENVE)